CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.10/KRIDL/CEMENT/2014-15

Date: 11.07.2014

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
AGENCY	:	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	:	Improvements to Roads and Drains at Doddabommasandra Old Village in Ward No.10, BBMP, Bangalore.
REFERENCE	:	EE/BTP/KRIDL/WO/465/2014-15 Dated: 21.02.2014
SAMPLE ID	:	Cement
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4)	28.50 %	-
2	a) Initial Setting Time	IS-4031 (Part -5)	155 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	475 Minutes	Not More than 600 Minutes
3	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	1 mm	Not more than 10 mm

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Job No.: CTCE/BBMP/W.No.10/KRIDL/SAND/2014-15 : 11.07.2014

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to Roads and Drains at Doddabommasandra Old Village in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/WO/465/2014-15 Dated: 21.02.2014

Date of Testing : 11.07.2014

Material : Sand Total Wt. of Aggregates in gms **1000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	62	6.20	6.20	93.8	90-100
2.36	108	10.80	17.00	83.0	75-100
1.18	213	21.30	38.30	61.7	55-90
600 Micron	252	25.20	63.50	36.5	35-59
300 Micron	183	18.30	81.80	18.2	8-30
150 Micron	152	15.20	97.00	3.0	0-10

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Job No.: CTCE/BBMP/W.No.10/KRIDL/AGG/2014-15 : 11.07.2014

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to Roads and Drains at Doddabommasandra Old Village in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/WO/465/2014-15 Dated: 21.02.2014

Date of Testing : 11.07.2014

Material : 40mm Aggregates

Total Wt. of Aggregates in gms **10000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	275	2.75	2.75	97.25	95-100
20	5130	51.30	54.05	45.95	30-70
10	3245	32.45	86.50	13.50	10-35
4.75	1150	11.50	98.00	2.00	0-5

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Job No.: CTCE/BBMP/W.No.10/KRIDL/CUBE/2014-15 12.08.2014

TEST REPORT ON CONCRETE CUBES

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the work : Improvements to Roads and Drains at Doddabommasandra Old Village in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/WO/465/2014-15 Dated: 21.02.2014

Sample ID : Road Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	15.07.2014	12.08.2014	8.234	516.9	22.97
2	15.07.2014	12.08.2014	8.158	501.3	22.28
3	15.07.2014	12.08.2014	8.392	525.8	23.37

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TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of the work	: Improvements to Roads and Drains at Doddabommasandra Old Village in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/WO/465/2014-15 Dated: 21.02.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	17.07.2014	14.08.2014	8.148	496.3	22.06
2	17.07.2014	14.08.2014	8.239	512.6	22.78
3	17.07.2014	14.08.2014	8.374	520.4	23.13

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Job No.: CTCE/BBMP/W.No.10/KRIDL/CUBE/2014-15 16.08.2014

TEST REPORT ON CONCRETE CUBES

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Agency : **Technical Manager,** KRIDL, Bangalore.

Name of the work : Improvements to Roads and Drains at Doddabommasandra Old Village in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/WO/465/2014-15 Dated: 21.02.2014

Sample ID : Road Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	19.07.2014	16.08.2014	8.236	488.6	21.72
2	19.07.2014	16.08.2014	8.475	513.2	22.81
3	19.07.2014	16.08.2014	8.392	502.7	22.34

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TEST REPORT ON CONCRETE CUBES

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Reference	: EE/BTP/KRIDL/WO/465/2014-15 Dated: 21.02.2014
Sample ID	: Road Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	21.07.2014	18.08.2014	8.285	494.8	21.99
2	21.07.2014	18.08.2014	8.347	506.2	22.50
3	21.07.2014	18.08.2014	8.496	519.3	23.08

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Reference : EE/BTP/KRIDL/WO/465/2014-15 Dated: 21.02.2014

Sample ID : Road Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	22.07.2014	19.08.2014	8.293	485.2	21.56
2	22.07.2014	19.08.2014	8.347	493.4	21.93
3	22.07.2014	19.08.2014	8.452	508.7	22.61

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